

Listing and Amendments to the Claims

This listing of claims will replace the claims that were published in the PCT Application:

1. (currently amended) An intrinsically safe pick-up for reproduction or recording devices for different optical recording media having at least two laser diodes (~~LD1, LD2~~) and having a monitor diode (~~PD~~) which controls the different light power levels of the laser diodes (~~LD1, LD2~~), comprising:
a switching means (~~SW~~), which is formed with interlocked switches (~~S1, S2~~), in order to produce a reference value which is associated with one laser diode (~~LD1 or LD2~~) with the monitor diode (~~PD~~) and in order to form an intrinsically safe pick-up (~~EPU~~).
2. (currently amended) An intrinsically safe pick-up according to claim 1, wherein the intrinsically safe pick-up (~~EPU~~) contains a switching means (~~SW~~) which contains interlocked switches (~~S1, S2~~) to which light power adjusting resistors (~~R1, R2~~) are connected.
3. (currently amended) An intrinsically safe pick-up according to claim 1, wherein the interlocked switches (~~S1, S2~~) of the switching means (~~SW~~) connect the monitor diode (~~PD~~) via a light power adjusting resistor (~~R1, R2~~) to the reference of a laser regulator (~~LR1, LR2~~) in order to generate a reference value in a laser control loop for one of the laser diodes (~~LD1 or LD2~~), and switch off all the light power adjusting resistors (~~R1, R2~~) in order to form an intrinsically safe pick-up (~~EPU~~).
4. (currently amended) An intrinsically safe pick-up according to claim 3, wherein at least two laser control loops are provided in order to set the light power levels of the laser diodes (~~LD1, LD2~~) with a monitor diode (~~PD~~), and each comprising a laser regulator (~~LR1, LR2~~) which is connected to the monitor diode (~~PD~~) and to which a controllable current source (~~Q1, Q2~~) is connected in order to set the light power levels of the laser diodes (~~LD1, LD2~~),

and with the laser regulators (~~LR1, LR2~~) being driven by a control signal (~~ST1, ST2~~) which identifies the type of optical recording medium in the reproduction or recording device.

5. (currently amended) An intrinsically safe pick-up according to claim 1, wherein a controllable current source (~~Q1, Q2~~) with a laser regulator (~~LR1, LR2~~) connected to the monitor diode (~~PD~~) is provided for each of the laser diodes (~~LD1, LD2~~).
6. (currently amended) An intrinsically safe pick-up according to claim 1, wherein the switching means (~~SW~~), which is formed by two interlocked switches (~~S1, S2~~), comprises a logic circuit in order to generate a reference value which is associated with a laser diode (~~LD1 or LD2~~) and in order to form an intrinsically safe pick-up (~~EPU~~), which logic circuit prevents simultaneous closure of the switches (~~S1, S2~~) and opens the switches (~~S1, S2~~) with simultaneous actuation.
7. (currently amended) An intrinsically safe pick-up according to claim 1, wherein the interlocked switches (~~S1, S2~~) are electronic switches.
8. (currently amended) An intrinsically safe pick-up according to claim 1, wherein the interlocked switches (~~S1, S2~~) are switches in whose control line a logic circuit is inserted.
9. (currently amended) An intrinsically safe pick-up according to claim 1, wherein the switching means (~~SW~~) comprises a logic circuit which is formed by two AND gates (~~U1, U2~~) each having an inverting input, and in which each inverting input of an AND gate (~~U1 or U2, respectively~~) is connected to the input of the other AND gate (~~U2 or U1, respectively~~), to which a switching signal (~~tSW1, tSW2~~) is applied for one of the switches (~~S1 or S2~~) of the switching means (~~SW~~), whose control input is connected to the output of the AND gate (~~U1 or U2~~) to whose input the switching signal (~~tSW1, tSW2~~) for the switch (~~S1 or S2~~) is applied.

10. (currently amended) An intrinsically safe pick-up according to claim 1, wherein the reference value which is associated with one laser diode (~~LD1 or LD2~~) together with the monitor diode (~~PD~~) is formed by light power adjusting means which are connected to the monitor diode (~~PD~~) via the switching means (~~SW~~).
11. (currently amended) An intrinsically safe pick-up according to claim 10, wherein the light power adjusting means which are connected to the monitor diode (~~PD~~) are light power adjusting resistors (~~R1, R2~~).
12. (currently amended) An intrinsically safe pick-up according to claim 1, wherein the switches (~~S1, S2~~) of the switching means (~~SW~~) are actuated via a logic circuit, which interlocks the switches (~~S1, S2~~) and forms an intrinsically safe pick-up (~~EPU~~), by means of a control signal (~~ST1, ST2~~) which identifies the type of optical recording medium in the reproduction or recording device.
13. (currently amended) An intrinsically safe pick-up according to claim 1, wherein the switches (~~S1, S2~~) of the switching means are controlled via a logic circuit, which interlocks the switches (~~S1, S2~~) and forms an intrinsically safe pick-up (~~EPU~~), by means of switching signals (~~tSW1, tSW2~~) from a modulator assembly (~~BMOD~~) which is connected to the laser diodes (~~LD1 or LD2~~).
14. (currently amended) An intrinsically safe pick-up according to claim 13, wherein a modulator (~~MOD~~) is provided in the modulator assembly (~~BMOD~~) for each of the laser diodes (~~LD1 or LD2~~) and has a control assembly (~~contr~~) which switches on the modulator (~~MOD~~) when the laser diode (~~LD1, LD2~~) to which it is connected is actuated, and wherein the control assembly (~~contr~~) generates a switching signal (~~tSW~~) for controlling the switches (~~S1, S2~~) by means of the logic circuit.

15. (currently amended) An intrinsically safe pick-up according to claim 1, wherein the control inputs of the switches (~~S1, S2~~) of the switching means (~~SW~~) are connected to comparators (~~K1, K2~~) which are connected to the laser diodes (~~LD1 or LD2~~), via a logic circuit which interlocks the switches (~~S1, S2~~) and forms an intrinsically safe pick-up (~~EPU~~).
16. (currently amended) An intrinsically safe pick-up according to claim 1, wherein light path adjusting resistors (~~R1, R2~~), which are provided on the monitor diode (~~PD~~) in order to generate a reference value which is associated with a laser diode (~~LD1 or LD2~~), are switched off by the switching means (~~SW~~) in order to form an intrinsically safe pick-up (~~EPU~~) having at least two laser diodes (~~LD1, LD2~~) and a monitor diode (~~PD~~) which controls different light power levels of the laser diodes (~~LD1, LD2~~).
17. (currently amended) An intrinsically safe pick-up according to claim 1, wherein the switching means (~~SW~~) and a modulator assembly (~~BMOD~~) which is connected to the laser diodes (~~LD1, LD2~~) are arranged on a common substrate (~~MS~~).
18. (currently amended) An intrinsically safe pick-up according to claim 1, wherein a switching means (~~SW~~) which comprises interlocked switches (~~S1, S2~~) is provided on the pick-up, by means of which an intrinsically safe pick-up (~~EPU~~) is formed and a reference value, which is associated with a respective laser diode (~~LD1, LD2~~), is formed in order to control the light power of the laser diode (~~LD1, LD2~~).
19. (currently amended) A reproduction or recording device for different optical recording media having at least two laser diodes (~~LD1, LD2~~) and the monitor diode (~~PD~~) which controls different light power levels of the laser diodes (~~LD1, LD2~~), ~~characterized in that wherein~~ the reproduction or recording device comprises an intrinsically safe pick-up (~~EPU~~) which is connected to a DVD/CD circuit (~~CS~~).

20. (currently amended) Reproduction or recording device according to claim 19, wherein the intrinsically safe pick-up (~~EPU~~) has laser diodes (~~LD1, LD2~~), which are integrated in a twin laser (~~TWL~~), and a monitor diode (~~PD~~).